

MX120 VoIP Gateways



Suitable for carrier and medium-enterprise VoIP/FoIP deployment, the MX120 Access Gateway offers a maximum capacity of 96 FXS lines and/or FXO lines and up to 96 concurrent calls expanded in modular increments as follows:

- 1U or 2U chassis supporting up to 48 or 96 lines
- 24, 48, 72, or 96 concurrent calls (based on DSP cards)
- FXS/FXO combinations as below:

Model	FXS Ports	FXO Ports
MX120-72S	72	0
MX120-96S	96	0
MX120-72FX	0	72
MX120-96FX0	0	96
MX120-64S/8	64	8
MX120-88S/8	88	8
MX120-60S/12	60	12

These are only 7 examples out of the dozens of combinations.

Feature Rich

The MX120, based on the embedded-Linux operating system, and supports both SIP and MGCP. Its rich PBX-like features makes the MX120 suitable as a hosted-PBX access terminal, e.g. call transfer, call pick-up, conference, caller ID, fashion ring, fork ring, fax, Radius call record, 500 routing rules, number translation, PSTN line fail-over on power failure or network interruption. This makes MX120 suitable for variety application requirements.

Easy to Operate and Maintain

The MX120 provides a Web-based management GUI, allowing the user to configure parameters, upgrade firmware, import and export configuration data, and monitor status. The MX120 also supports remote management standards, such as Option 66 auto-provisioning, Telnet, TFTP, SNMPv2, TR069, TR104 and TR106.

High Interoperability

The MX120 has completed interoperability tests with many softswitches and IP-PBXs from worldwide vendors, including Microsoft (OCS/Lync), Cisco (CallManager), Nortel (CS1000), and softswitches from Huawei, ZTE, and Ericson, among others.

Support

Support in the EU and Western Hemisphere is provided by NetGen Communications; New Rock Technologies provides support elsewhere.

- Applications: IP voice service (e.g. IP-Centrex), enterprise long distance by-pass, IPPBX, PBX tie-trunk, call center
- Flexible configuration of FXS/FXO ports
- FXO Feature: Dial tone or voice prompt for 2nd-stage dialing, busy tone detection, caller ID detection, polarity-reversal detection
- G.711/T.38 fax, POS terminal, and modem support
- Busy-tone detection and polarity reversal of FXO ports
- 500 routing-rule capacity
- PSTN failover on power failure or network interruption
- IP filter and encryption for security
- 110~220VAC or -48V DC Power Input
- 3GPP IMS support
- Option 66, TR069/TR104/TR106 for remote configuration and management
- Compatible with unified communication solutions, such as CallManager, OCS/Lync, and Asterisk

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MX120

System Specifications

System Feature

Hardware Configuration	24-96 ports per system. Flexible configuration of FXO or FXS lines in any combination of 4-line increments
Voice Processing	Voice codec: G.711, G.729A, G.723.1, GSM, iLBC Echo cancellation: G.168, 64ms echo tail Dynamic jitter buffer, Voice activity detection (VAD), Packet-loss concealment QoS: IP TOS

Call Feature

Calling type	Voice/FAX/Data
IVR voice prompt	Prompt on 2 nd stage dialing, Prompt on busy
Encryption	Support many types of signaling and/or voice encryption
Call handling	User configurable dialing plan, up to 500 routing rules
Fax Processing	G.711 pass-through, T.38 Fax Relay
DTMF	RFC 2833, SIP INFO, Transparent audio
Billing	RADIUS Interface; Polarity Reverse
User Feature	Caller ID, Call forward, Call transfer, Call fork, Hot line, Fashion ring, No disturbing, Speed dialing

Network Function

Security	IP address screening
NAT	Static, Dynamic, STUN
Protocol	PPPoE, DHCP, DNS, DDNS, 802.1p, TFTP, Telnet

Configuration/Management

WEB GUI	Configuration, Firmware upgrade, System monitoring
EMS	Remote configuration, Upgrade, Alarming, Traffic & Statistic report
Auto Provisioning	Auto configure/upgrade, Provision server discover, TFTP, FTP, HTTP

Protocol and Standard

Protocol	RFC3261 & supplementary, RFC3435, 3GPP TS 24.228, TS 24.229
Standard	Caller ID (FSK/DTMF), Call progress tone plan (embed 19 countries tone plans, support under defined tone plan)

Hardware

Central Processor	FREESCALE PowerQUICC MPC8247
Digital Signal Processor	TI TMS320VC5509A
System memory	64MB/128MB
Flash Memory	8MB/16MB
LED	Power, System status, Network status, Line status
Ethernet Connector	RJ-45, 10/100 Base-T, Automatic cross-over
FXO/FXS Connector	RJ-45 (4 line pairs follow T568B scheme)
Max. User Line Length	1500 meters
Ring Equivalent Value	5 REN (short distance)
Power Supply	100~240V AC, 50/60 Hz, 1A max
Power Consumption	125W max
Dimension (H x W x D)	44 x 440 x 300 mm (1U) 88 x 440 x 300 mm (2U)
Weight (1U)	Net weight: 4.0Kg; Gross weight (include package): 6.4Kg *
Weight (2U)	Net weight: 6.1Kg; Gross weight (include package): 9.8Kg *

Environment Requirement

Operating	Temperature: 0~40 °C; Humidity: 10%~90% (non conducting)
Non Operating	Temperature: -10~60 °C; Humidity: 5%~90% (non conducting)

Product Series

- MX VoIP Gateway Series
- MX100-TG Trunking Gateway
- OM IP-PBX
- OX Hybrid Office Telephone System
- Element Management System

* The value is measured under standard hardware configuration, may vary under different hardware configurations